

# **PIFSC Report on the Logbook Program for the American Samoa Longline Fishery April-June 2008<sup>1</sup>**

Pacific Islands Fisheries Science Center

Summary statistics of American Samoa longline catch and effort for the second quarter of 2008, based on date of haul, are shown in Table 1. The table is derived from all logbook data submitted as of September 4, 2008. As of this date, the documented delinquency rate according to the Department of Marine and Wildlife Resources (DMWR) Daily Effort Census and Delinquency Reporting System for the second quarter of 2008 was about 4%.

According to the longline logbook data, 24 vessels turned in some or all of their longline logs for sets made during the second quarter of 2008 (Fig. 1). These 24 vessels made 1179 sets (Fig. 2) and deployed 3,563,107 hooks (Fig. 3). The second quarter of 2008 showed declines in both effort and catch for most species over the second quarter of last year. Compared to the second quarter of 2007, the number of vessels turning in logs this quarter decreased by 4% from 25 vessels to 24; the number of sets decreased by 14% and the number of hooks used decreased by 11%. However, the average number of hooks used per set increased by 3.4%, from 2923 to 3022, reflecting an almost completed trend toward a fishing fleet of larger vessels deploying more hooks per set.

The total catch for all species combined was 78,170 fish (Fig. 4) which is a decrease of 19% compared to the second quarter of last year. Albacore continued to dominate the catch with 50,438 fish caught in the second quarter of 2008 (Fig. 5), a 26% decrease over the 68,290 albacore caught in the second quarter of 2007. The catch of most species showed similar declines when compared to the 2<sup>nd</sup> quarter of 2007. Bigeye tuna catch (Fig. 6) showed a decrease of 55%, yellowfin tuna catch (Fig. 8) showed a decrease of 45%, mahimahi catch (Fig. 9) declined by 13% and wahoo catch (Fig. 10) dropped by 41%. The catch of skipjack tuna (Fig. 7) increased dramatically to 2.6 times its value in the 2<sup>nd</sup> quarter of 2007 while the catches of billfish (Fig. 11) and sharks (Fig. 12) showed increases of 18% and 45%, respectively compared to their 2<sup>nd</sup> quarter values of 2007.

The catch per 1000 hooks (CPUE) decreased for species whose catch declined and increased for species whose catch increased. Compared to the 2<sup>nd</sup> quarter of last year, the CPUE of albacore (Fig. 13) decreased by 17%, bigeye tuna CPUE (Fig. 14) decreased by 50%, yellowfin tuna CPUE (Fig. 16) decreased by 39%, mahimahi CPUE (Fig. 17) declined by 3%, and wahoo CPUE (Fig. 18) dropped by 34%. However, as with the catch, the CPUE of skipjack tuna (Fig. 15) increased dramatically to almost 2.6 times its value in the 2<sup>nd</sup> quarter of 2007 and the CPUEs for billfish (Fig. 19) and sharks (Fig. 20) increased by 32% and 63%, respectively from their year-ago quarterly values.

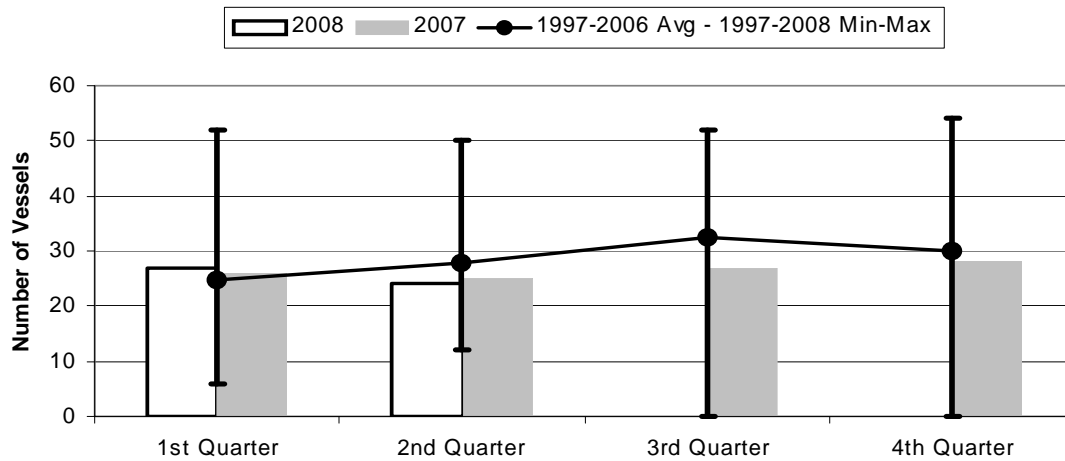
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<sup>1</sup> PIFSC Data Report DR-08-010  
Issued 10 September 2008

**Table 1. Summary of fish catch and nominal fishing effort by American Samoa Longline vessels during the second quarter of 2008 based on longline logbooks submitted before Sept. 4, 2008**

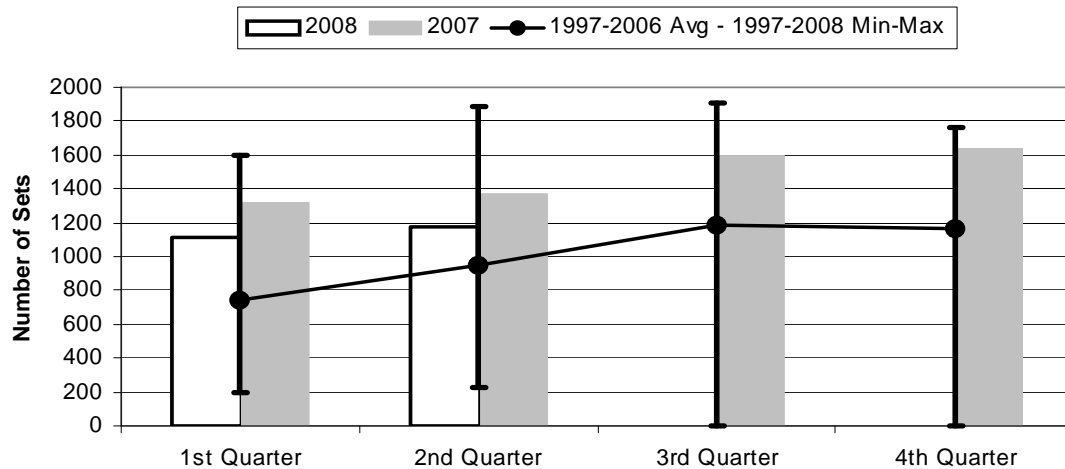
<b>TRIP INFORMATION</b>				
	Number of Vessels:		24	
	Number of Trips:		88	
	Number of Sets:		1179	
	1000's of Hooks Set:		3563	
	Number of Lightsticks Used:		0	
<b>CATCH INFORMATION</b>				
<b>Species</b>	<b>Number Caught</b>	<b>Number Kept</b>	<b>Number Released</b>	<b>Number Caught /1000 Hooks</b>
<b>BILLFISH</b>				
Black marlin	13	0	13	0.00
Blue marlin	736	116	620	0.21
Striped marlin	95	0	95	0.03
Sailfish	114	3	111	0.03
Spearfish	231	13	218	0.06
Swordfish	46	13	33	0.01
<b>TOTALS</b>	<b>1235</b>	<b>145</b>	<b>1090</b>	<b>0.35</b>
<b>SHARKS</b>				
Blue shark	1373	10	1363	0.39
Shortfin mako shark	42	0	42	0.01
Thresher shark	85	0	85	0.02
White tip oceanic shark	274	2	272	0.08
Sharks (misc)	28	0	28	0.01
<b>TOTALS</b>	<b>1802</b>	<b>12</b>	<b>1790</b>	<b>0.51</b>
<b>TUNA</b>				
Albacore	50438	50304	134	14.16
Bigeye tuna	1550	1430	120	0.44
Bluefin tuna	1	0	1	0.00
Skipjack tuna	13036	10987	2049	3.66
Yellowfin tuna	6273	6198	75	1.76
<b>TOTALS</b>	<b>71298</b>	<b>68919</b>	<b>2379</b>	<b>20.01</b>
<b>OTHER PELAGICS</b>				
Mahimahi	463	338	125	0.13
Moonfish	129	28	101	0.04
Oilfish	992	5	987	0.28
Pomfret	286	14	272	0.08
Wahoo	1945	1609	336	0.55
<b>TOTALS</b>	<b>3815</b>	<b>1994</b>	<b>1821</b>	<b>1.07</b>
<b>NON-PMUS</b>				
Pelagic fish (misc)	24	1	23	0.01
<b>TOTALS</b>	<b>24</b>	<b>1</b>	<b>23</b>	<b>0.01</b>

**Figure 1. American Samoa Longline Vessels Submitting Logs by Quarter for**



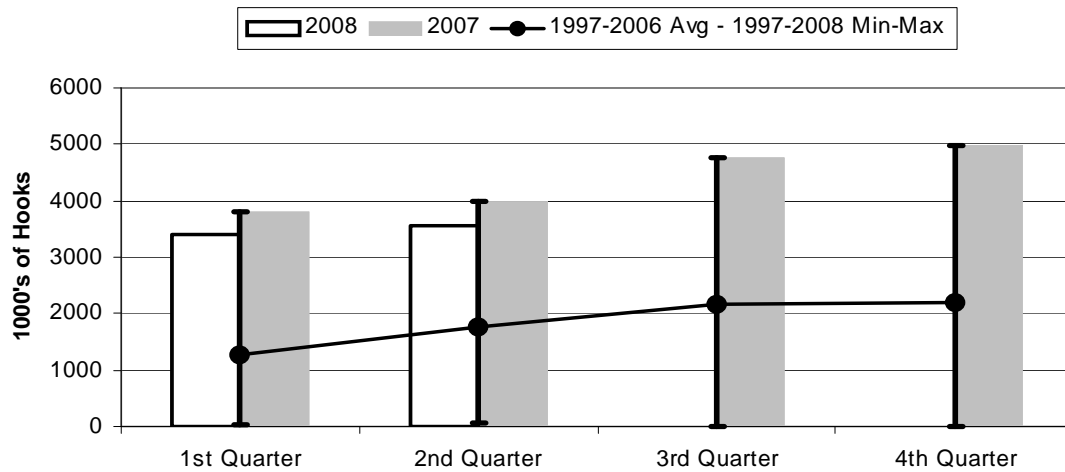
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	27	24	0	0
2007	26	25	27	28
1997-2008 Max	52	50	52	54
1997-2006 Avg	24.7	27.7	32.4	30.0
1997-2008 Min	6	12	0	0

**Figure 2. Number of Sets by American Samoa Longline Vessels by Quarter for**



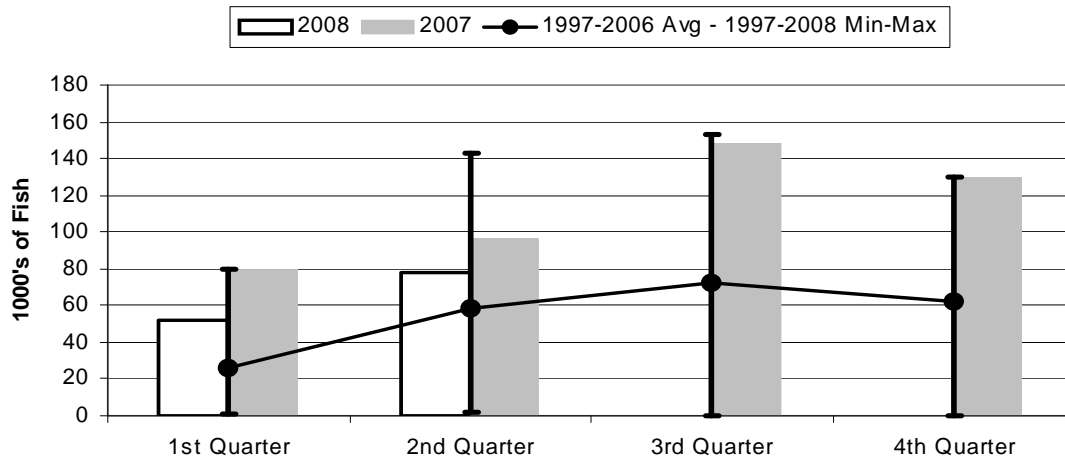
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	1109	1179	0	0
2007	1316	1366	1595	1642
1997-2008 Max	1602	1886	1903	1758
1997-2006 Avg	741	953	1183	1162
1997-2008 Min	192	223	0	0

**Figure 3. Number of Hooks Set by the American Samoa Longline Fleet by Quarter for**



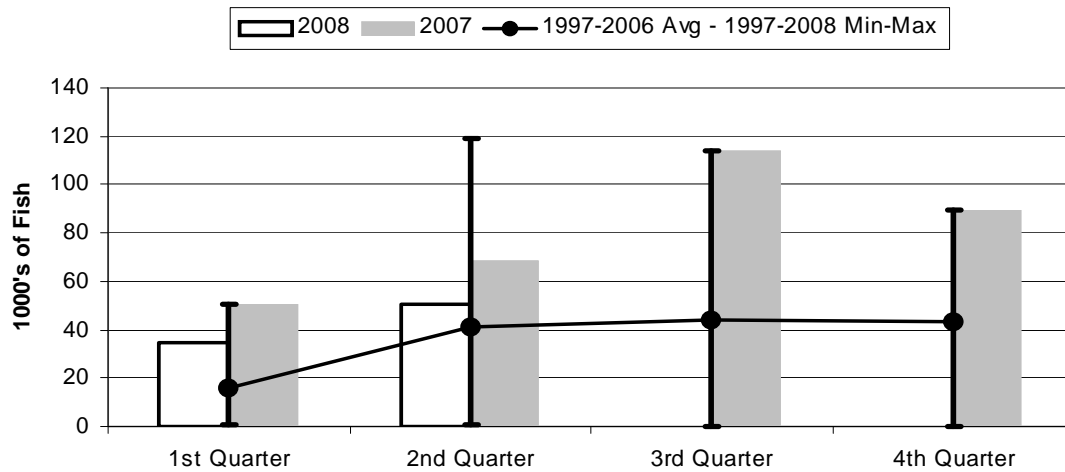
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	3402	3563	0	0
2007	3805	3993	4769	4985
1997-2008 Max	3805	3993	4769	4985
1997-2006 Avg	1262	1760	2152	2189
1997-2008 Min	41	51	0	0

**Figure 4. American Samoa Longline Total Catch (All Species) by Quarter for**



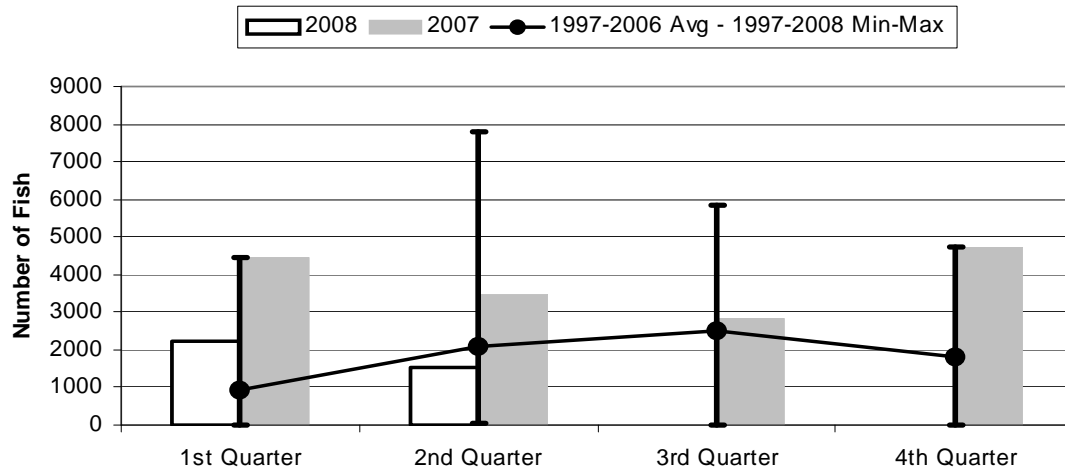
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	52.27	78.17	0.00	0.00
2007	79.57	96.95	148.56	130.24
1997-2008 Max	79.57	142.60	153.30	130.24
1997-2006 Avg	26.13	58.47	72.00	62.27
1997-2008 Min	1.32	1.42	0.00	0.00

**Figure 5. American Samoa Longline Albacore Catch by Quarter for**



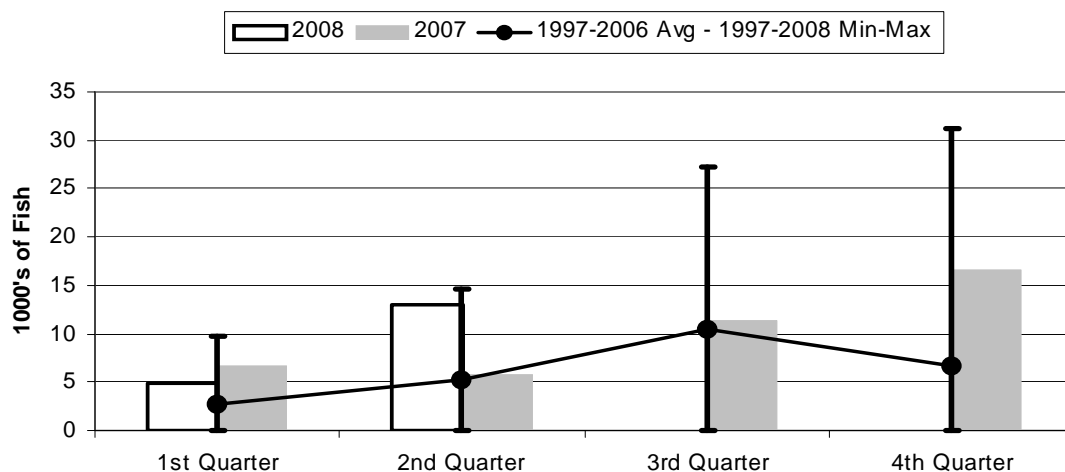
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	34.95	50.44	0.00	0.00
2007	50.38	68.29	113.83	89.39
1997-2008 Max	50.38	118.99	113.83	89.39
1997-2006 Avg	15.99	40.82	44.06	43.21
1997-2008 Min	0.94	0.85	0.00	0.00

**Figure 6. American Samoa Longline Bigeye Tuna Catch by Quarter for**



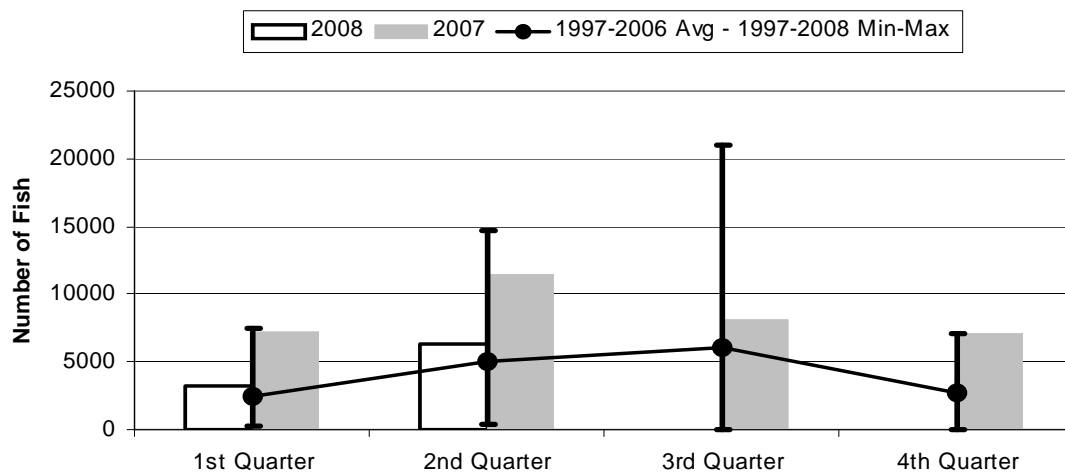
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	2225	1550	0	0
2007	4466	3485	2850	4728
1997-2008 Max	4466	7785	5824	4728
1997-2006 Avg	947	2082	2504	1790
1997-2008 Min	6	26	0	0

**Figure 7. American Samoa Longline Skipjack Tuna Catch by Quarter for**



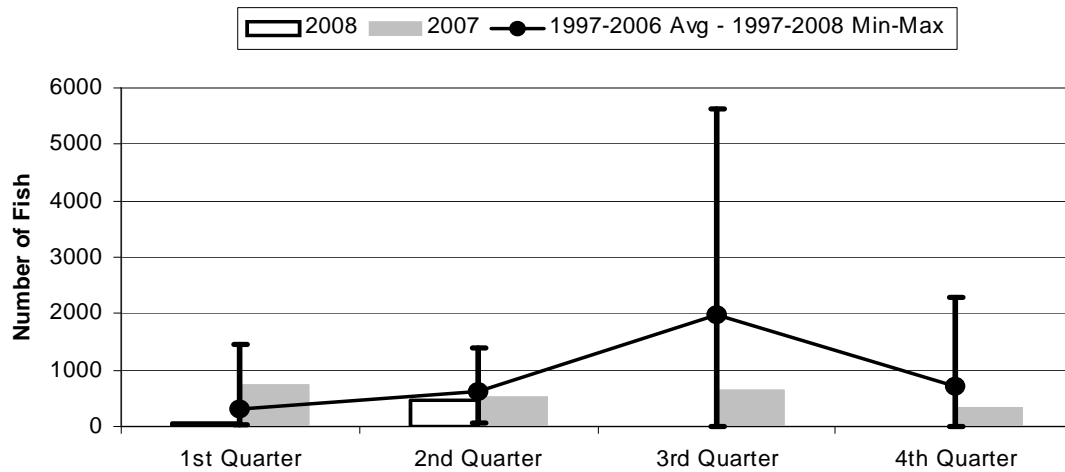
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	4.94	13.04	0.00	0.00
2007	6.74	5.71	11.33	16.64
1997-2008 Max	9.81	14.61	27.23	31.19
1997-2006 Avg	2.64	5.22	10.44	6.73
1997-2008 Min	0.00	0.01	0.00	0.00

**Figure 8. American Samoa Longline Yellowfin Tuna Catch by Quarter for**



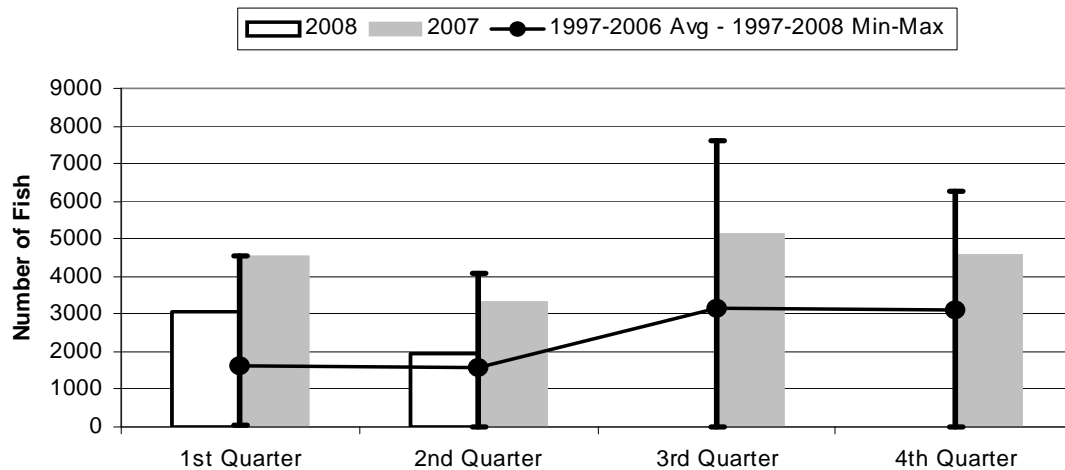
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	3197	6273	0	0
2007	7174	11488	8135	7104
1997-2008 Max	7428	14681	20993	7104
1997-2006 Avg	2508	5024	6013	2744
1997-2008 Min	213	356	0	0

**Figure 9. American Samoa Mahimahi Catch by Quarter for**



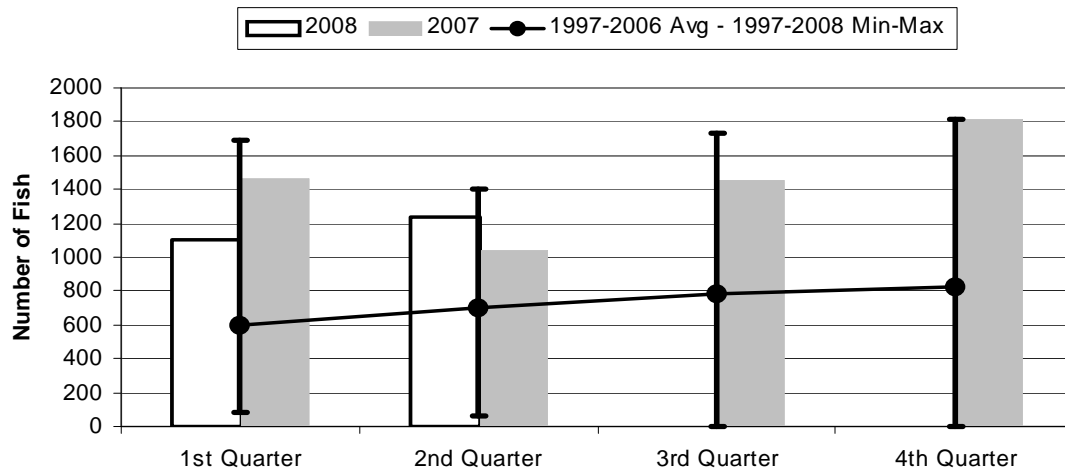
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	55	463	0	0
2007	729	535	655	330
1997-2008 Max	1455	1391	5642	2297
1997-2006 Avg	315	604	1984	709
1997-2008 Min	30	59	0	0

**Figure 10. American Samoa Wahoo Catch by Quarter for**



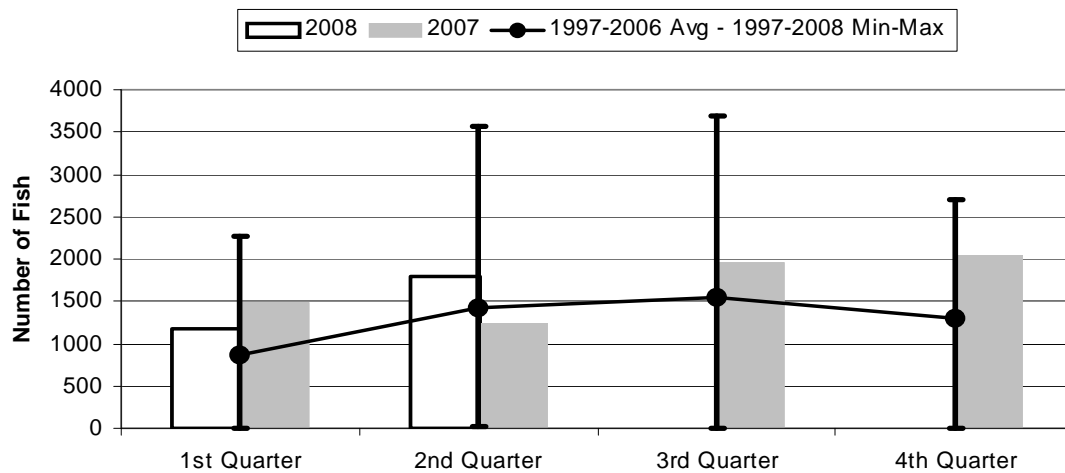
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	3078	1945	0	0
2007	4524	3336	5135	4573
1997-2008 Max	4524	4076	7629	6281
1997-2006 Avg	1614	1555	3149	3115
1997-2008 Min	27	20	0	0

**Figure 11. American Samoa Billfish Catch by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	1100	1235	0	0
2007	1468	1045	1450	1819
1997-2008 Max	1692	1404	1729	1819
1997-2006 Avg	594	697	785	821
1997-2008 Min	83	58	0	0

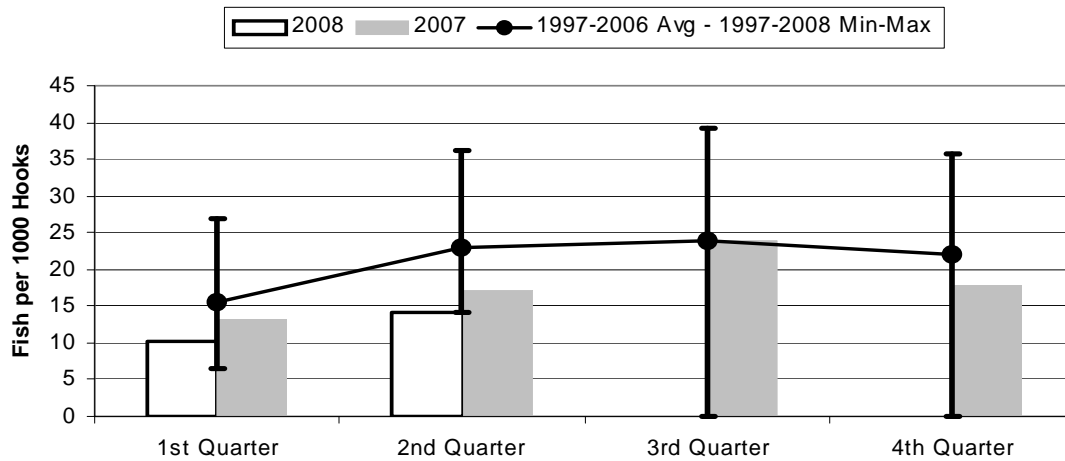
**Figure 12. American Samoa Shark Catch by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	1174	1802	0	0
2007	1480	1242	1952	2044
1997-2008 Max	2262	3562	3686	2695
1997-2006 Avg	864	1432	1553	1303
1997-2008 Min	5	16	0	0

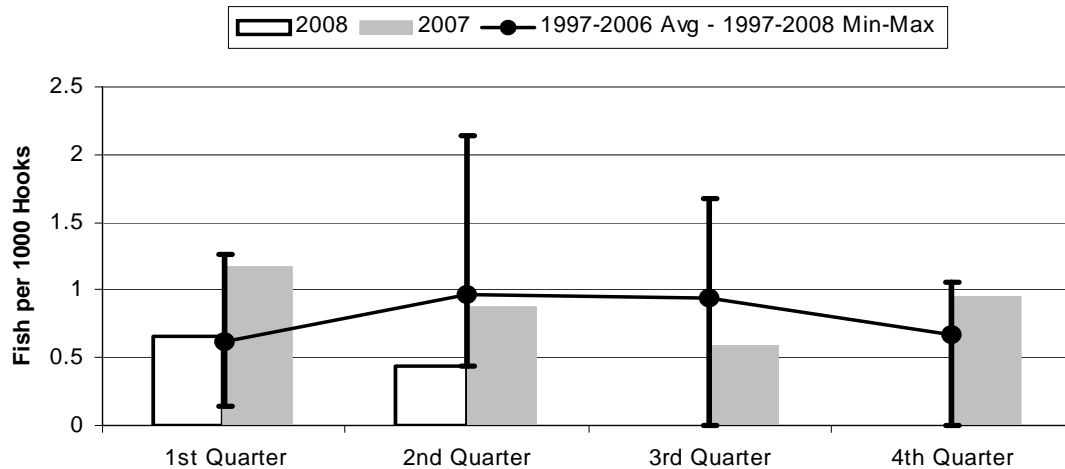


**Figure 13. American Samoa Longline Albacore Catch/1000 Hooks by Quarter for**



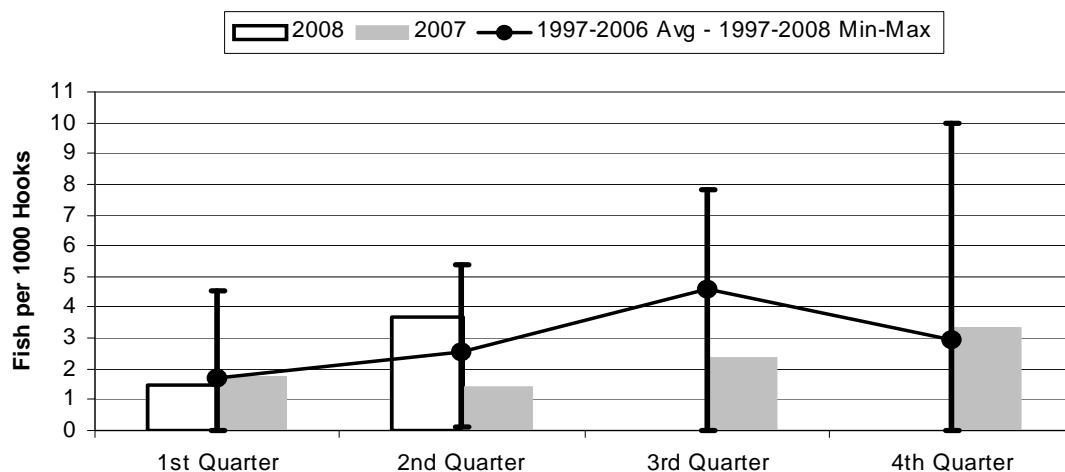
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	10.27	14.16	0.00	0.00
2007	13.24	17.10	23.87	17.93
1997-2008 Max	27.01	36.18	39.13	35.75
1997-2006 Avg	15.64	23.07	23.92	22.13
1997-2008 Min	6.58	14.16	0.00	0.00

**Figure 14. American Samoa Longline Bigeye Tuna Catch/1000 Hooks by Quarter for**



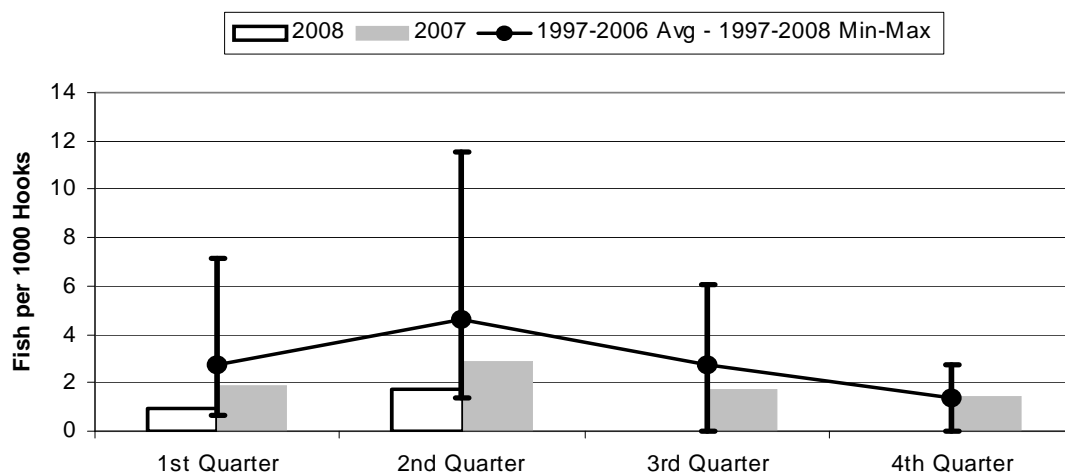
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.654	0.435	0.000	0.000
2007	1.174	0.873	0.598	0.948
1997-2008 Max	1.267	2.145	1.676	1.051
1997-2006 Avg	0.614	0.965	0.943	0.665
1997-2008 Min	0.146	0.435	0.000	0.000

**Figure 15. American Samoa Longline Skipjack Tuna Catch/1000 Hooks by Quarter for**



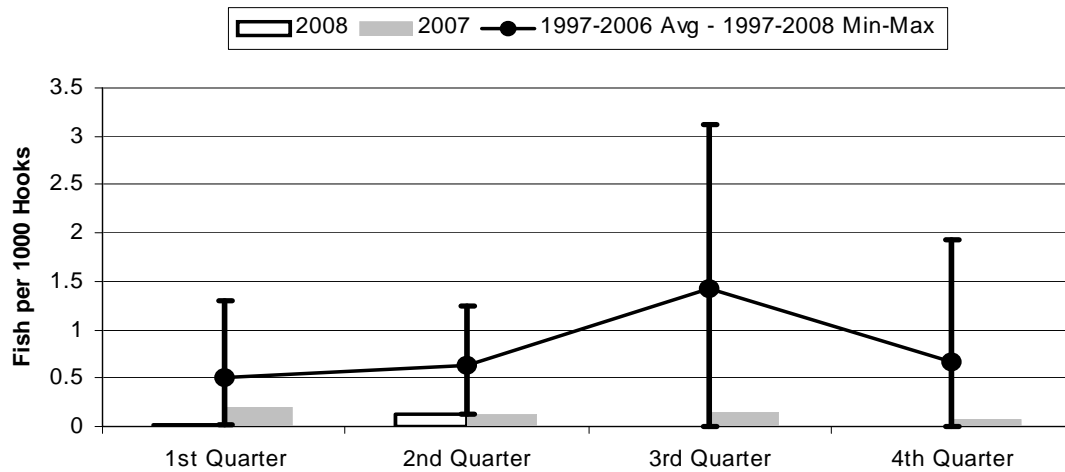
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	1.453	3.659	0.000	0.000
2007	1.770	1.430	2.375	3.337
1997-2008 Max	4.556	5.388	7.837	9.975
1997-2006 Avg	1.710	2.561	4.606	2.933
1997-2008 Min	0.000	0.118	0.000	0.000

**Figure 16. American Samoa Yellowfin Tuna Catch/1000 Hooks by Quarter for**



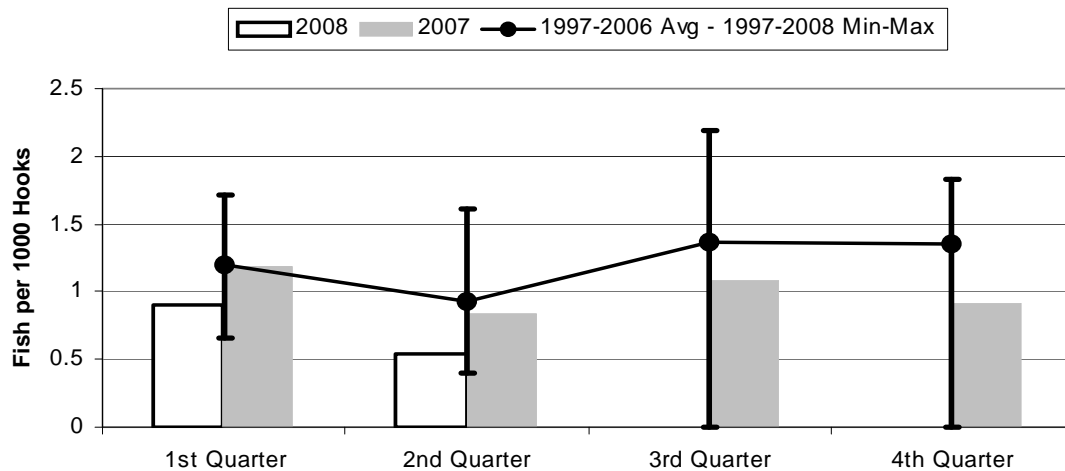
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.940	1.761	0.000	0.000
2007	1.886	2.877	1.706	1.425
1997-2008 Max	7.120	11.51	6.041	2.757
1997-2006 Avg	2.707	4.647	2.707	1.344
1997-2008 Min	0.663	1.336	0.000	0.000

**Figure 17. American Samoa Longline Mahimahi Catch/1000 Hooks by Quarter for**



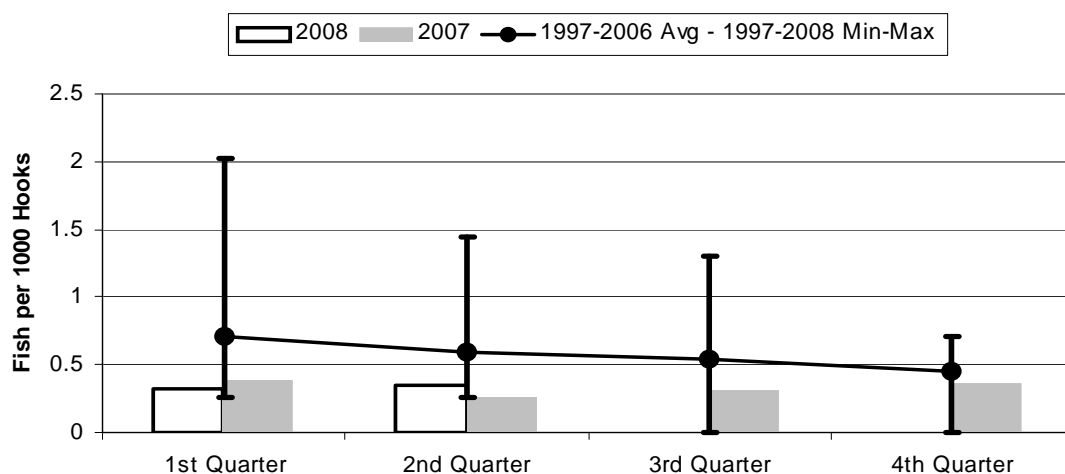
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.016	0.130	0.000	0.000
2007	0.192	0.134	0.137	0.066
1997-2008 Max	1.304	1.248	3.125	1.932
1997-2006 Avg	0.497	0.623	1.419	0.668
1997-2008 Min	0.016	0.123	0.000	0.000

**Figure 18. American Samoa Wahoo Catch/1000 Hooks by Quarter for**



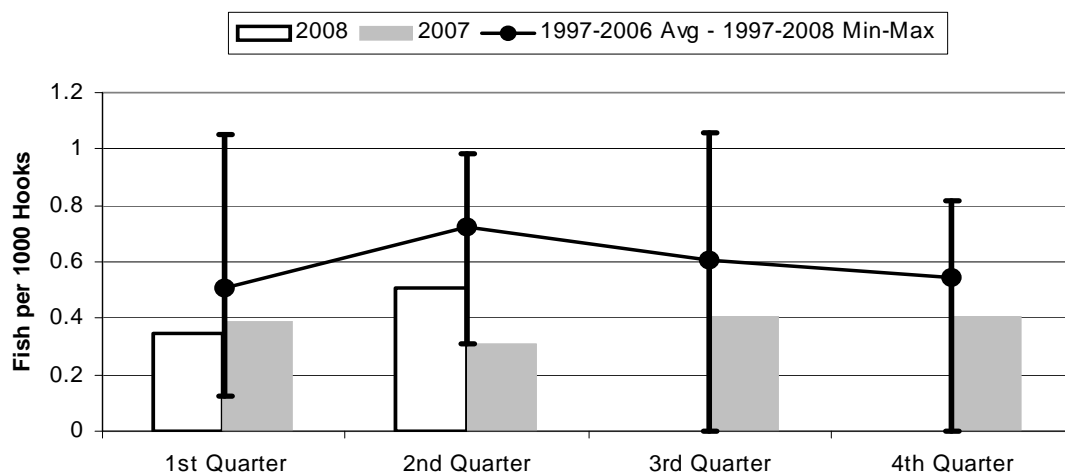
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.905	0.546	0.000	0.000
2007	1.189	0.836	1.077	0.917
1997-2008 Max	1.710	1.617	2.195	1.832
1997-2006 Avg	1.199	0.923	1.360	1.347
1997-2008 Min	0.657	0.394	0.000	0.000

**Figure 19. American Samoa Billfish Catch/1000 Hooks by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.324	0.347	0.000	0.000
2007	0.386	0.262	0.304	0.365
1997-2008 Max	2.019	1.439	1.306	0.712
1997-2006 Avg	0.705	0.586	0.538	0.448
1997-2008 Min	0.252	0.262	0.000	0.000

**Figure 20. American Samoa Shark Catch/1000 Hooks by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.345	0.506	0.000	0.000
2007	0.389	0.311	0.409	0.410
1997-2008 Max	1.051	0.986	1.061	0.819
1997-2006 Avg	0.507	0.721	0.605	0.543
1997-2008 Min	0.122	0.311	0.000	0.000